

Application No. 10/021,062
Amendment dated December 23, 2005
Reply to Office Action dated August 8, 2005

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-18 remain pending.

The Examiner has objected to claims 2-4, 9-11, 13-14 and 16-18 due to minor informalities, and has also rejected claims 5-7 and 11-14 under 35 U.S.C. § 112 as being indefinite. Although Applicant respectfully traverses these rejections, in the interest of advancing prosecution, editorial amendments are being made to the claims as indicated above. However, concerning the Examiner's objection to the use of the term "the Internet", Applicant respectfully submits that the entire phrase "the Internet" is the term of art, and is thus proper.

In view of the above, Applicant respectfully requests that the Examiner withdraw these objections and rejections.

On a more substantive note, the Examiner has rejected claims 1, 4-5, 8, 11-12, 15 and 18 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application No. 2002/0067756 to Schilling, et al. Further, the Examiner has rejected claims 2, 6, 9, 13 and 16 under 35 U.S.C. § 103(a) as being unpatentable over the published Schilling patent application in view of U.S. Patent No. 6,512,784 to Schilling, et al. In addition, claims 3, 10 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the published Schilling patent application in further view of published U.S. Patent Application No. 2005/0137786 to Breed, et al., and claims 7 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the published Schilling patent

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application in view of published U.S. Patent Application No. 2005/0164664 to DiFonzo, et al.
These rejections are respectfully traversed.

Specifically, as discussed in more detail below, Applicant respectfully submits that some of these references, at best, teach the use of a spreading sequence in communications. Nowhere do these references teach or suggest that the actual spreading of the signal is based on information pertaining to an address of the destination node (which can be one of the nodes in the network or an access point in the network) and information pertaining to at least one other factor.

The rejections will now be discussed in more detail.

As described throughout the present application, the embodiments of the present invention enable a node in a communications network to spread a transmission signal (e.g., by applying a spreading sequence to the transmission signal) based on an address of the node to which the transmission signal is destined and information pertaining to at least one other factor. The other factor can include a network prefix, time of day, and/or provider information. In other words, the actual manner in which the transmission signal is spread is based on the address information and other factor. This is done, for example, to attempt to minimize interference between signals transmitted by neighboring nodes.

Concerning the 35 U.S.C. § 102(e) rejection of claims 1, 4, 5, 8, 11, 12, 15 and 16 based on the published Schilling patent application, Applicant respectfully submits that this reference teaches a distributed network and spread-spectrum system comprising a plurality of remote stations and a

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plurality of nodes. Applicant notes that the plurality of remote stations are unlike the nodes of the network, since the remote stations cannot communicate directly with each other, and are thus not "nodes" in an ad-hoc network. Also, and perhaps more importantly, Applicant respectfully submits that the paragraphs of the published Schilling patent application that were cited by the Examiner generally teach that the packets being transmitted undergo spread spectrum modulation. Applicant notes that nowhere does the published Schilling patent application teach or suggest that the specific manner in which the packets are spread are based on address information of a destination node (another node or an access point) and at least one other factor as recited in the independent claims of the present application. In other words, nothing in the published Schilling patent teaches or suggests that the packets undergo a particular type of spread spectrum modulation depending on where they are destined and at least one other factor. As discussed throughout the present application, the particular type of signal spreading that is performed by the claimed embodiments of the present invention can minimize destructive interference between signals transmitted by neighboring nodes. Applicant respectfully submits that the Schilling system is unable to attain this advantage with its general use of spread signal modulation.

For all these reasons, Applicant respectfully submits that the published Schilling patent application fails to anticipate even the independent claims of the present application. Hence, all claims should be allowable over the published Schilling patent application.

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Concerning the 35 U.S.C. § 103(a) rejection of claims 2, 6, 9, 13 and 16 based on the published Schilling patent application and the Schilling '784 patent, Applicant respectfully submits that as discussed above, the published Schilling patent application merely teaches a distributed network and spread-spectrum system that generally employs spread spectrum modulation. The Schilling '784 patent teaches a system for sharing capacity by remote stations using circuit and packet switching. Granted, the sections of the Schilling '784 patent cited by the Examiner may teach that the packets include information, and based on the information, a remote station that receives that packet "can determine relative power, and Doppler shift in the carrier frequency f_D of the particular base station to the remote unit." However, nowhere does the Schilling '784 patent teach or suggest that the manner in which the transmission signal is spread is based on this information. At best, these cited passages of the Schilling '784 patent merely teach that the receiving unit can determine features about the base station from which it received the packet.

Accordingly, Applicant respectfully submits that one skilled in the art would not have found it obvious or possible to achieve the embodiments of the present invention even as recited in the independent claims based on the teachings of the published Schilling patent application and the Schilling '784 patent. Hence, all claims should be allowable.

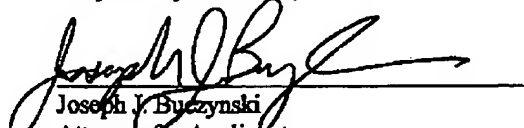
Concerning the 35 U.S.C. § 103(a) rejection of claims 3, 10 and 17 based on the published Schilling patent application and the Breed patent, as well as the 35 U.S.C. § 103(a) rejection of claims 7 and 14 based on the published Schilling patent application and the DiFonzo et al. patent,

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Applicant respectfully submits that neither the Breed patent nor the DiFonzo patent teach or suggest spreading a transmission signal based on information pertaining to an address of the destination node (which can be one of the nodes in the network or an access point in the network) and information pertaining to at least one other factor. Accordingly, Applicant respectfully submits that these patents also fail to make up for the deficiencies in the teachings of the published Schilling patent application as discussed above to have rendered obvious the embodiments of the present invention even as recited in the independent claims. Accordingly, all claims should be allowable.

In view of the above, it is believed that the subject application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted,


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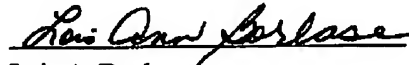
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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this AMENDMENT (along with any documents referred to as being attached or enclosed) is being facsimile transmitted to the U.S. Patent & Trademark Office, Attention Examiner: Inder P. Mehra, Art Unit 2666, Facsimile Number 571-273-8300, on the date shown below:

Dated: December 23, 2005


Lois A. Borlase